

L 31194-66

ACC NR: AP6022568

effect. Thus, there is no reason to believe that the effects of low irradiation doses, as manifested in structural rearrangements of chromosomes, are related to changes in the DNA macromolecules. The results of studies on the physicomechanical properties of supramolecular oriented DNP structures present in a medium with physiological ionic strength indicate that these formations are highly sensitive to radiation. Orig. art. has: 10 figures. [JPRS] O

SUB CODE: 07, 06, 20 / SUBM DATE: 18Dec65 / ORIG REF: 013 / OTH REF: 013

Card 2/2 1C

MARTYNOV, P.A., mashinist teplevoza; SOKOLOV, B.I., mashinist teplevoza;  
YEVSSEYEV, A.G., mashinist teplevoza; VASILENKO, V.I., mashinist  
teplevoza; LAUKHIN, T.A., mashinist teplevoza

We shall raise the monthly productivity for diesel locomotives  
to 40 million tkm. Elek. i tepl. tiaga 2 no.11:5 N '58.

(MIRA 11:12)

1. Depe Liski Yugo-Vostochney deregi.  
(Liski--Diesel Locomotives)

MARTYNOV, F.I., inzh.

Remote control of traction substations. Elek. i tepl. tiaga no.1:  
35-36 '57.  
(MIRA 12:3)

1. Nachal'nik uchastka energosnabzheniya, Moskva - Ramenskoye  
Moskovsko-Ryazanskoy dorogi.

(Electric railroads--Substations)  
(Remote control)

MARTYNOV, G., inzhener; SHITOV, I., inzhener

All-Union Conference on Automatization of Industrial Processes  
in Iron Metallurgy. Gor. zhur. no.7:3 of cover J1 '56.

(MLRA 9:9)

(Metallurgy) (Automatic control)

MARTYNOV, G., kand.arkhitektury

Atbasar State Farm. Nauka i zhizn' 29 no.7:59-61 J1 '62.  
(MIRA 16:6)  
(TSelinograd Province--State farms)

MARTYNOV, G. A.

USSR

The influence of boron-magnesium fertilizers on the yields of turnip and carrot seed. (I. A. Martynov. Selsko-Semennodostavo 19, No. 5, 62-5 (1951); Chem. Zentral 1932, 838.---The dusting of turnips and carrots twice with B-Mg fertilizers (15% boric acid) at the beginning of the blooming period and again during blooming (20 kg. per ha.) increased the yield of turnip seed approx. 80% and that of carrot seed 36%. M. J. Moore)

MARTYNOV, G.N.

KOLESNIKOV, A.G.; MARTYNOV, G.A.

Calculation of the depth of ground freezing and thawing. Mat.po  
lab.issl.merzl.grunt.l:13-36 '53.

(MLRA 7:2)

(Frozen ground)

MARTYNOV, G.A.

Deriving the fundamental equation of heat conductivity for freezing  
and thawing ground. Mat.k osn.uch.o merz.zon.zem.kory no.3:  
167-178 '56. (MIRA 13:9)  
(Frozen ground--Thermal properties)

MARTYNOV, G.A.

Calorimetric method of determining the quantity of fluid water in  
frozen ground. Mat.k osn.uch.o merz.zon.zem.kory no.3:  
179-185 '56. (MIRA 13:9)

(Frozen ground)  
(Water, Underground)  
(Calorimetry)

MARTYNOV, G.

TSYTOVICH, N.A.; NERSESOVA, Z.A.; BOZHENOVA, A.P.; TATYUNOV, I.A.; DOSTOVALOV,  
B.N.; SHUMSKIY, P.A.; BAKULIN, F.G.; SAVEL'YEV, B.A.; ZHUKOV, V.F.;  
MARTYNOV, G.A.; VYALOV, S.S.; SHUSHERINA, Ye.P.

Physical phenomena and processes in freezing, frozen, and thawing  
soils; general comments. Mat. po lab. issl. mersl. grunt. no.3:7-  
114 '57. (MIRA 10:11)

(Frozen ground)

MARTYNOV, G.A.

"Interaction of the mineral part of soils with water" by I.A.  
Tiutiunov, "Pochvovedenie," no.2, 1959. Reviewed by G.A.  
Martynov. Pochvovedenie no.12:107-109 D '59.  
(MIRA 13:4)

1. Institut fizicheskoy khimii AN SSSR, Laboratoriya  
poverkhnostnykh yavleniy.  
(Minerals in soil) (Soil moisture) (Tiutiunov, I.A.)

MARTYNOV, G.A.

Effect of periodical temperature variations on the freezing depth. Trudy GGO no.94:80-85 '60. (MIRA 13:5)  
(Soil freezing)

MARTYNOV, G.A.

Comparing the results of temperature field calculations for a  
thawing ground with observation data. Trudy GGO no.94:86-89  
'60. (MIRA 13:5)

(Thawing)

ACC NR: AP6028722

SOURCE CODE: UU/U122/66/000/008/0070/0073

AUTHORS: Larin, M. N. (Doctor of technical sciences, Professor); Martynov, G. A. (Engineer)

ORG: none

TITLE: Methods of heating parts during machining

SOURCE: Vestnik mashinostroyeniya, no. 8, 1966, 70-73

TOPIC TAGS: metal machining, hot machining, radiation heating, induction heating, metalworking

ABSTRACT: Various methods of locally heating the cutting region of a part during its machining are discussed qualitatively, with numerous references to literature and patents. The major part of the report is devoted to the origin, range of applications, and various advantages and disadvantages of electric contact and induction heating geometries (shown graphically), although an optical (radiation) heating method (U.S. patent 2861166) is also briefly described. A comparison of the cost required by different methods to heat 1 cm<sup>2</sup> to a depth of 3 mm is tabulated as follows (in %): electric contact with roller electrode (industrial frequency) - 50; gas flame - 60; induction heating (500--10 000 cps) - 100; induction heating (100--1000 kcps) - 125; electric contact (100--1000 kcps) - 150. Orig. art. has: 2 figures and 1 table.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 008/ OTH REF: 003

Card 1/1

UDC: 621.941.016.2

ACC NR: AP6034568

SOURCE CODE: UR/0020/66/170/006/1296/1299

AUTHOR: Martynov, G. A.; Muler, A. L.

ORG: Institute of Physical Chemistry, Academy of Sciences, SSSR (Institut fizichesk oy khimii Akademii nauk SSSR)

TITLE: Allowance for intermolecular interaction in the statistical theory of adsorption

SOURCE: AN SSSR. Doklady, v. 170, no. 6, 1966, 1296-1299

TOPIC TAGS: adsorption, molecular interaction, intermolecular force, distribution function, statistic distribution

ABSTRACT: The authors considered a possible variant of the solution to the problem of allowance for the interaction between adsorbed particles; the solution is based on the use of the method of molecular distribution functions. An advantage of this method is that on the one hand it makes it possible to include into the initial equations the particle pair interaction parameter, and on the other hand it avoids the separation of the adsorbed matter into volume and surface phases. The calculation is based on a chain of Bogolyubov equations for the distribution functions. The equation for the unary function  $G_a(z)$ , describing the probability of finding a particle of species a at a distance  $z$  from the surface of the adsorbant occupying the half-space  $z < 0$ , is reduced to an approximate closed equation which yields an approximation of the binary function that describes correctly the behavior of the distribution function at both

Card 1/2

UDC: 541.183.02 + 533.583.2

ACC NR: AP6034568

large and small distances. The result is a system of equations which can be solved analytically if the degree of coating by the adsorption layer is not too large. This report was presented by Academician N. N. Bogolyubov 24 January 1966. Orig. art. has: 21 formulas.

SUB CODE: 20/ SUBM DATE: 11Jan66/ ORIG REF: 001/ OTH REF: 001

Card 2/2

DERVAGIN, S.V., otd. red.; ALEXANDROV, N.N., red.; MARSHAL, G.A.,  
red.; MIRONOV, L.L., red.; TEPLOVSKY, N.W., red.;  
SANKVITSER, I.I., red.

[Studies in the field of surface forces] Icsledenivaniia v  
elektro poverkhnostnym fil; sbornik naukl. trudov. Moskva,  
(NIRA 17:10)  
Nauka, 1964. 360 p.

I. Konferentsiya po poverkhnostnym filam, Institut fizicheskoj  
khimii Akademii nauk SSSR. 2d, 1964. Chlen-korres-  
pondent AN SSSR (for Bergman).

*MARTYNIV, G.A.*

		336.6 : 530.48
<p>✓ 4282. DISTRIBUTION OF HEAT IN A TWO-PHASE SYSTEM FOR A SPECIFIED EQUATION OF MOTION OF THE PHASE BOUNDARY. G.A.Martynov.</p> <p>IZM.-IZD. Pl., Vol. 25, No. 10, 1784-87 (1955). In Russian. English translation int. Atomic Energy Res. Estab. (Harwell) Transl. 710, 16 pp. (1956).</p> <p>Since the systems of integral equations for the direct Stefan prob- lem are always very difficult to solve, even numerically, the inverse Stefan problem is studied. For a given equation of motion of the phase boundary and initial temperature distribution, the temperatures at the stationary phase boundary and in the medium are determined. It is shown that this inverse problem has a unique solution in all cases. The author also deals with the setting up of the initial in- tegral equations for the Stefan problem by the extension method, for equations of a parabolic type.</p> <p>R.C.Murray</p>		3
<i>W.H.</i> <i>Some day</i>		

MARTYNOV, G.A.

SUBJECT USSR/MATHEMATICS/Differential equations CARD 1/2 PG - 560  
 AUTHOR MARTYNOV G.A.  
 TITLE On the solution of the inverse Stefan problem for a half space  
 for linear motion of the phase boundaries.  
 PERIODICAL Doklady Akad.Nauk 109, 279-282 (1956)  
 reviewed 2/1957

The inverse Stefan problem is formulated as follows. Let be given

$$(1) \quad \frac{\partial \vartheta_1}{\partial t} = a_1 \frac{\partial^2 \vartheta_1}{\partial x^2} \quad 0 \leq x \leq h(t), \quad h(0) = 0$$

$$\frac{\partial \vartheta_2}{\partial t} = a_2 \frac{\partial^2 \vartheta_2}{\partial x^2} \quad h(t) \leq x \leq \infty .$$

The distributions of temperature  $\vartheta_1(x, t) \leq 0$ ,  $\vartheta_2(x, t) \geq 0$  are to be determined and the step of temperature  $\theta(t)$  on the unmovable limit  $x = 0$ , such that for a given initial distribution in the second phase:

$$(2) \quad t = 0, \quad \vartheta_2(x, 0) = f(x) \geq 0$$

and for definite heat exchange on the movable boundary of the two phases  $x = h(t)$ :

Doklady Akad. Nauk 109, 279-282 (1956)

CARD 2/2

PG - 560

$$(3) \quad \Phi_1(h, t) = 0, \quad \lambda_1 \frac{\partial \Phi_1(h, t)}{\partial x} - \lambda_2 \frac{\partial \Phi_2(h, t)}{\partial x} = q \frac{dh}{dt}$$

the given motion of limit takes place:

$$(4) \quad x = h(t) \geq h(0) = 0.$$

After having formerly investigated (ZTF 25, 10, 1754 (1955)) the case  $h = v\sqrt{t}$   
the author now considers the case  $h = vt$ . By passage to the movable coordinate  
system  $z = x - vt$  and substitution

$$\Phi_n(z, t) = \Psi_n(z, t) \exp \left[ -\frac{v}{2a_n} z - \frac{v^2}{4a_n} t \right] \quad (n=1, 2)$$

he obtains the canonic equations  $\frac{\partial \Psi_n}{\partial t} = a_n \frac{\partial^2 \Psi_n}{\partial z^2}$  from which follows

$$\Psi_n(z, t) = \frac{1}{2\sqrt{\pi}a_n t} \int_0^\infty \varphi_n(\zeta) \left\{ \exp \left[ -\frac{(z-\zeta)^2}{4a_n t} \right] - \exp \left[ -\frac{(z+\zeta)^2}{4a_n t} \right] \right\} d\zeta,$$

where  $\varphi_2$  is known and  $\varphi_1$  must be determined from the conditions (3). For  $\varphi_1$   
an integral equation is obtained which is solved by series substitution.

INSTITUTION: Acad.Sci USSR. — That (name) in Abrahe

SOV/24-5)-3-30/33

AUTHOR: Martynov, G. A. (Moscow)

TITLE: The Initial Velocity of the Phase Boundary in the One-Dimensional Form of Stefan's Problem

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Energetika i avtomatika 1959, Nr 3, pp 184-187 (USSR)

ABSTRACT: A problem that has been solved before in a rigorous form (Ref 6) is solved again by a simpler method. The solutions are given in a form slightly different from that given by Carslaw. The paper contains 6 references, 5 of which are Soviet (including Nr 6 - a translation of Carslaw's book), and 1 is German

SUBMITTED: June 26, 1958.

Card 1/1

9.2580

AUTHOR: Martynov, G. A.

TITLE: A Generator of High Voltage Rectangular Pulses

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 5,

66381  
SOV/120-59-5-39/46

ABSTRACT: Zamkov (Ref 1) has described a high voltage generator and suggested that the pulse amplitude at the generator use of cathode followers can be increased to 10 kV or more by the the thyatrons by TGI2-325/16 thyatrons. It is not clear from that paper whether the author did in fact try this. a TGI2-325/16 thyatron. However, it was found that it was not possible to get pulses greater than 3.5 kV by carefully screening the thyatron  $\text{J}_2$ . The present author reports that the addition of a special compensating circuit improves the final circuit employed is shown in Fig 3. Fig 1 shows the positive pulse which appears at the grid of thyatron  $\text{J}_1$  when the thyatron  $\text{J}_1$  fires (without the use ✓

Card 1/2

66381

SOV/120-59-5-39/46

A Generator of High Voltage Rectangular Pulses

of the compensating circuit). Fig 2 shows the pulse at the grid of the thyratron  $\text{N}_2$  using the compensating circuit. The circuit shown in Fig 3 gives output pulses of 6.0 kV. There are 3 figures and 1 Soviet reference.

SUBMITTED: September 8, 1958

✓

Card 2/2

Sov. / 662

## NAME &amp; WORK INFORMATION

Leningrad. Glaznaya gortitschekhnye obseruateryi. Sov. / 662  
 Voprosy radio perevoda slova "metoda" (problem in the Physics of the  
 Near-Surface Air Layer) Leningrad, gizmovoizdat, 1960. 161 p.  
 (series) Test Study, vyp. 90. Erreka opli izdert. 850 copies printed.  
 (series) Glaznaya gortitschekhnye obseruateryi Lami A.I. Teplovoz:  
 gosudarstvennye gizmovo-territorialnye stantsii pri Sverkho Ministerstve  
 Sovetov.

Na. (title page). B.I. Laptushkin, Doctor of Physics and Mathematics; Dr.

(inside back). T.V. Vinogradov, fresh. Ed.; P.V. Volozh.  
 This publication is intended for meteorologists specializing in the  
 lower layers of the atmosphere. It may also be of interest to hydrogeologists,  
 construction engineers, and other specialists whose activities are influenced  
 by atmospheric conditions.

CONTENTS. This issue of the Transactions of the Main Geophysical Observatory  
 contains 10 articles dealing mainly with problems of the physics of the near-  
 surface air layer. Connections between theoretical calculations and  
 observations are simulated and the results of both theoretical calculations and  
 experimental investigations given. Individual articles analyze the  
 temperature regime of the active surface of soil and the factors determining  
 thermal conditions of the boundary layer. Results of the investigation  
 are presented in two articles. In addition, some problems of methods to  
 experimental investigation of the near-surface layer are discussed. No  
 generalities are mentioned. References follow each article.

## NAME OF CONTRIBUTOR:

- Laptushkin, B.I. Formulation of the Problem of the Stationary Structure  
 of the Boundary Layer  
 Pavlenko, O.D., and I.B. Orlova. Stationary Distribution of Wind, Tem-  
 perature, and Thermal Conductance in the Boundary Layer Under Different  
 States of Stability 6  
 Artyuk, E.S., and L.A. Elaginovskaya. Wind Under City Conditions 29  
 Gerasimov, I.A., and P.M. Shchegolev. The Role of Radiation and Turbulent  
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 X Artyuk, E.S., and L.A. Elaginovskaya. Operational Method for Calculating  
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 Gerasimov, T.P. Investigation of Fog-Formation Characteristics 151  
 Smirnov, G.A. Diurnal Variation of Absolute Humidity in the Near-  
 Surface Air Layer 156

AVAILABLE: Library of Congress

Sov. / 662

2/1/62

Card 1/4

16.8000,24.5000

AUTHOR: Martynov, G. A.

TITLE: Solution of Stepan's Inverse Problem  
Symmetry

PERIODICAL: Zhurnal Tekhnicheskoy Kibernetiki  
141 (USSR)

ABSTRACT: Many thermal processes can be described by a system of nonlinear equations for the temperature and the system of nonlinear equations for the boundary motion (Stephan). The solution of the direct problem is not without considerable mathematical difficulties. It is therefore more advantageous to make the transition to the inverse problem. The inverse problem of Stephan (G. A. Martynov, Zh. Tekhnicheskoy Kibernetiki, No. 10, 1754, 1955). In this inverse problem, it is required to find a given temperature distribution and a boundary motion of the boundary between the problem and the environment, given the temperature on the fixed boundary of the body. The inverse problem is related to the Stefan problem. The inverse problem is related to the Stefan problem.

Card 1/6

Solution of Stephan's Inverse Problem:  
Case of Spherical Symmetry

and the solution may be obtained. If the boundary condition is not given, the physical content remains the same, but the solution is not unique; it is possible to obtain a number of different solutions. In the case of the inverse problem for various kinds of boundary conditions, the boundary and various initial conditions are given. It is not always possible to predict, when will the solution exist, given the boundary conditions, approximate solution, or the type of boundary conditions that develop. In many cases, the approximate solution and the exact solution may be obtained from the same boundary conditions. In the case of the straight problem of Stephan, if the boundary is given by spherical symmetry, the inverse problem can be solved in the form of the following equation:

Card 2/C

Solution of Stephan's Inverse Problem in  
Case of Spherical Symmetry

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SOV/511-30-2-17/1c

$$\left. \begin{aligned} \frac{\partial \theta_1}{\partial t} &= a_1 \frac{1}{r^2} \frac{\partial}{\partial r} \left( r^2 \frac{\partial \theta_1}{\partial r} \right); \quad R_0 \leq r \leq R(t), \\ \frac{\partial \theta_2}{\partial t} &= a_2 \frac{1}{r^2} \frac{\partial}{\partial r} \left( r^2 \frac{\partial \theta_2}{\partial r} \right); \quad R(t) \leq r \leq \infty, \end{aligned} \right\} \quad (1)$$

$$t = 0, \quad R(0) = R_0; \quad \theta_2(r, 0) = f(r) \geq 0, \quad (2)$$

$$r = R(t) \quad \left\{ \begin{aligned} \theta_1(R, t) &= 0; \quad \theta_2(R, t) = 0, \\ \nu_1 \frac{\partial \theta_1(R, t)}{\partial r} - \nu_2 \frac{\partial \theta_2(R, t)}{\partial r} &= q \frac{dR}{dt}, \end{aligned} \right. \quad (3)$$

$$r = R(t) \quad (4)$$

where the last equation represents the law of motion of the phase boundary. Putting

$$h(t) = R(t) - R_0, \quad \theta_k(r, t) = r \theta_k(r, t) \text{ and } r = r - R_0,$$

the system of Eqs. (1) to (3) becomes

Card 3/6

Solution of Stephan's Inverse Problem in  
Case of Spherical Symmetry

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SOV/57-39-2-1/18

$$\left. \begin{array}{l} \frac{d\theta_1}{dt} = a_1 \frac{d^2\theta_1}{dx^2}; \quad 0 < x < h(t), \\ \frac{d\theta_2}{dt} = a_2 \frac{d^2\theta_2}{dx^2}; \quad h(t) < x < \alpha, \end{array} \right\} \quad (1_i)$$

$$t = 0, \quad h(0) = 0, \quad \theta_1(x, 0) = (x - R_0)f(x) = F(x), \quad (2_i)$$

$$x = h(t) \left. \begin{array}{l} \theta_1(h, t) = 0; \quad \theta_2(h, t) = 0, \\ \nu_1 \frac{d\theta_1(h, t)}{dx} = \nu_2 \frac{d\theta_2(h, t)}{dx} = -\frac{q}{2} \frac{dh^2}{dt} + qR_0 \frac{dh}{dt}. \end{array} \right\} \quad (3_i)$$

If the law of motion is given by

$$h = v\sqrt{t}, \quad (4_i)$$

Card 4/6      the author looks for a solution of the form

Solution of Stephan's Inverse Problem in  
Case of Spherical Symmetry

77,319  
FOV 1,1-3,1-2,1-1,1

$$\theta_k = \frac{1}{2\sqrt{\pi}ak^2} \left\{ \int_0^\infty \varphi_k(\xi) e^{-\frac{(x-\xi)^2}{4ak^2}} d\xi + \int_{-\infty}^0 \psi_k(\xi) e^{-\frac{(x-\xi)^2}{4ak^2}} d\xi \right\} \quad (k=1, 2), \quad (5)$$

where  $\varphi_2(x) = F(x)$  according to (21). The author further shows how to obtain various terms in expression (5). Assuming a different law of boundary motion

$$h = vt. \quad (10)$$

the author manages to reduce the problem to the solution of

$$\int_0^\infty \xi \varphi_1''(\xi) e^{-\frac{(x-\xi)^2}{4ak^2}} d\xi = \int_0^\infty \xi \varphi_1(\xi) e^{-\frac{(x-\xi)^2}{4ak^2}} d\xi. \quad (15)$$

Card 5/6

Solution of Stephan's Inverse Problem in  
Case of Spherical Symmetry

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SOV/57-30-2-16, 17

which is an integral equation already solved by the  
author (DAN SSSR, 109 Nr 2, 279-282, 1956). The quantity  
 $\varphi_1^{**}$  is related linearly to the quantity  $\varphi_1$  defined  
in (5). There are 3 Soviet references.

ASSOCIATION: Institute of Structural Physics and Safety Constructions  
(Nauchno-issledovatel'skiy Institut strukturnoy fiziki  
i bezrazhdushchikh konstruktsiy)

SUBMITTED: July 7, 1958

Card 6/6

MARTYNOV, G A

PHASE I BOOK EXPLOITATION

SOV/5590

Konferentsiya po poverkhnostnym silam. Moscow, 1960.

Issledovaniya v oblasti poverkhnostnykh sil; sbornik dokladov na konferentsii po poverkhnostnym silam, aprel' 1960 g. (Studies in the Field of Surface Forces; Collection of Reports of the Conference on Surface Forces, Held in April 1960) Moscow, Izd-vo AN SSSR, 1961. 231 p. Errata printed on the inside of back cover. 2500 copies printed.

Sponsoring Agency: Institut fizicheskoy khimii Akademii nauk SSSR.

Resp. Ed.: B. V. Deryagin, Corresponding Member, Academy of Sciences USSR; Editorial Board: N. N. Zakhavayeva, N. A. Krotova, M. M. Kusakov, S. V. Merpin, P. S. Frolov, M. V. Talayev and G. I. Fuchs; Ed. of Publishing House: A. L. Bankvitser Tech. Ed.: Yu. V. Rylina.

PURPOSE: This book is intended for physical chemists.

Card 1/8

Studies in the Field of Surface Forces (Cont.)

SCV/5590

COVERAGE: This is a collection of 25 articles in physical chemistry on problems of surface phenomena investigated at or in association with the Laboratory of Surface Phenomena of the Institute of Physical Chemistry of the Academy of Sciences USSR. The first article provides a detailed chronological account of the Laboratory's work from the day of its establishment in 1935 to the present time. The remaining articles discuss general surface force problems, polymer adhesion, surface forces in thin liquid layers, surface phenomena in dispersed systems, and surface forces in aerosols. Names of scientists who have been or are now associated with the Laboratory of Surface Phenomena are listed with references to their past and present associations. Each article is accompanied by references.

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Kinetic Equation of Coagulation 220  
AVAILABLE: Library of Congress

Card 8/6

JA/rsm/os  
10/26/61

MARTYNOV, G.A. (Moskva)

Effect of single-phase pressure on phase equilibrium parameters.  
Zhur. fiz. khim. 35 no.7:1518-1523 Jl '61. (MIRA 14:7)

1. Akademiya nauk SSSR, Institut fizicheskoy khimii.  
(Phase rule and equilibrium)

DERYAGIN, B.V.; MARTYNOV, G.A.

Wedge pressure of a gas film. Dokl.AN SSSR 144 no.4:825-  
828 Je '62. (MIRA 15:5)

1. Institut fizicheskoy khimii AN SSSR. 2. Chlen-korrespondent  
AN SSSR (for Deryagin).  
(Films (Chemistry)) (Gases)

MARTYNOV, G.A.

Determination of the correlative functions of dense gases and liquids. Part 1: A system of rigid globules. Zhur. eksp. i teor. fiz. 45 no.3:656-663 S '63. (MIRA 16:10)

1. Institut fizicheskoy khimii AN SSSR.  
(Gases, Kinetic theory of)

I-14353-63

EWT(d)/FCC(w)/BDS AFTTC IJP(C)

ACCESSION NR: AP3003855

S/0020/63/151/003/0601/0603  
5/2AUTHORS: Ali-Zade, P. G.; Martynov, G. A.; Melamed, V. G.

TITLE: Effect of image forces on charge distribution in double electric layer

SOURCE: AN SSSR. Doklady\*, v. 151, no. 3, 1963, 601-603

TOPIC TAGS: image force, charge distribution, Poisson-Boltzmann equation

ABSTRACT: Wagner (Phys. Zs., 25, 1924, 474) and Onsager et al (J. Chem. Phys. 2, 1934, 528) postulate that there is no difference in potentials on the boundary of two phases and that the difference in ion concentration in the vicinity of the boundary is due to electrical interaction. On the other hand, Hui Chapman (Martynov, G. A., Sbornik. Issledovaniya v oblasti poverkhnostnykh yavleniy, Izd. AN SSSR, 1963) postulate that change in ion concentration is due to difference in the potential  $\psi_0$ . The object of this investigation was to find the effect of the

Card

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L 14352-63

ACCESSION NR: AP3003855

electrical interaction in all double layers when  $\psi_b \neq 0$ . The Poisson-Boltzmann equation is the foundation of the theory of double electrical layer, and, according to this equation, the energy of the ions in the vicinity of the boundary is zero when the potential is zero. But, due to the presence of ionic atmosphere, the energy of the ions will not be zero when the surface potential  $\psi$  is zero. Consequently, the  $U_0$  from the Poisson equation has the value  $U_0 = e\psi + X_a$ , where  $X_a$  is the energy due to ionic atmosphere. By substituting this expression into the Poisson-Boltzmann equation and after necessary rearrangement, a workable equation has been solved by using the UPM-5 computer. The results of calculations show that, in the case of a monoequivalent solution, the effect of ionic atmosphere is not over 10%, but in case of two-equivalent solutions the value of  $\eta$  calculated by Hui method is 100% higher and it is expected that it will be still higher if polyequivalent solutions are used. Orig. art. has: 1 figure, 1 table, and 7 equations.

ASSOCIATION: Inst. of Physical Chemistry, Academy of Sciences, SSSR

Cord

2/12

MARTYNOV, G.A.; DERYAGIN, B.V.

Electrical double layer in fused salts and concentrated electrolyte  
solutions. Dokl. AN SSSR 152 no.1:140-142 S '63. (MIRA 10:9)

1. Laboratoriya poverkhnostnykh yavleniy Instituta fizicheskoy khimii  
AN SSSR. 2. Chlen-korrespondent AN SSSR (for Deryagin).

(Fused salts--Electric properties)  
(Electrolyte solutions)

MARTYNOV, G. A.

"Statistical theory of electrical double layer."

report to be presented at the 4th Intl Cong on Surface Active Substances,  
Brussels, Belgium, 7-12 Sep 64.

MARTYNOV, G.A.

Statistical theory of electrolyte solutions. Part 1:  
Derivation of the equation. Elektronnaya 1 no.3:332-  
339 Mr '65. (M A 1st.)

I. Institut fizicheskoy khimii Akad. SSSR.

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001032620007-0

SECRET

SOURCE: [REDACTED]  
SPECIAL AGENT IN CHARGE: [REDACTED]  
DATE: [REDACTED]

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001032620007-0"

MARTYNOV, G.A.; SMILGA, V.P.

Interaction between colloidal particles having dipole molecules adsorbed on their surface. Koll. zhur. 27 no.2:250-255 Mr.-Ap '65.  
(MIRA 18:6)

1. Institut fizicheskoy khimii AN SSSR, Moskva.

DERYAGIN, B.V.; MARTYNOV, G.A.; GUTOF, Yu.V.

Thermodynamics and stability of free films. Moll.zhur. 27  
no. 3:357-364 My-Je '65. (MIRA 1P:12)

1. Institut fizicheskoy khimii AN SSSR, Moskva. Submitted  
Nov. 3, 1964.

L 37134-66 EWT(m)/EWP(t)/ETI/EPM(k) LJP(c) JD/HW/GD  
ACC NR: AT6010486 SOURCE CODE: UR/0000/65/000/000/0012/0016

AUTHOR: Martynov, G. A. (Engineer)

ORG: none

TITLE: The problem of cutting high-ore magnetic alloys in the heated state

SOURCE: Moscow, Vyssheye tekhnicheskoye uchilishche, Obrabotka metallov rezhaniyem i davleniyem (Machining and pressure working of metals). Moscow, Izd-vo Mashinostroyeniye, 1965, 12-16

TOPIC TAGS: metal cutting, metal working, nickel alloy, iron alloy, aluminum alloy

ABSTRACT: The author discusses in some detail the many difficulties encountered in the machining of the high-ore alloys used in industrial permanent magnets. The technological causes of these machining difficulties are analyzed, and it is noted that the great hardness and brittleness of the material are primarily responsible for these problems. The author proposes a new method, calling for the machining (by cutting) of the magnetic alloys in the heated state. It is claimed that the method ensures excellent stability of the cutting tool, a low degree of stock contamination, high machining productivity (as opposed to the very low productivity of present techniques), and a very satisfactory quality for the machined surface. The author also analyzes the results of studies into the effect of temperature in the heating of the blanks and of various modes of cutting on the coarseness of the machined surface.

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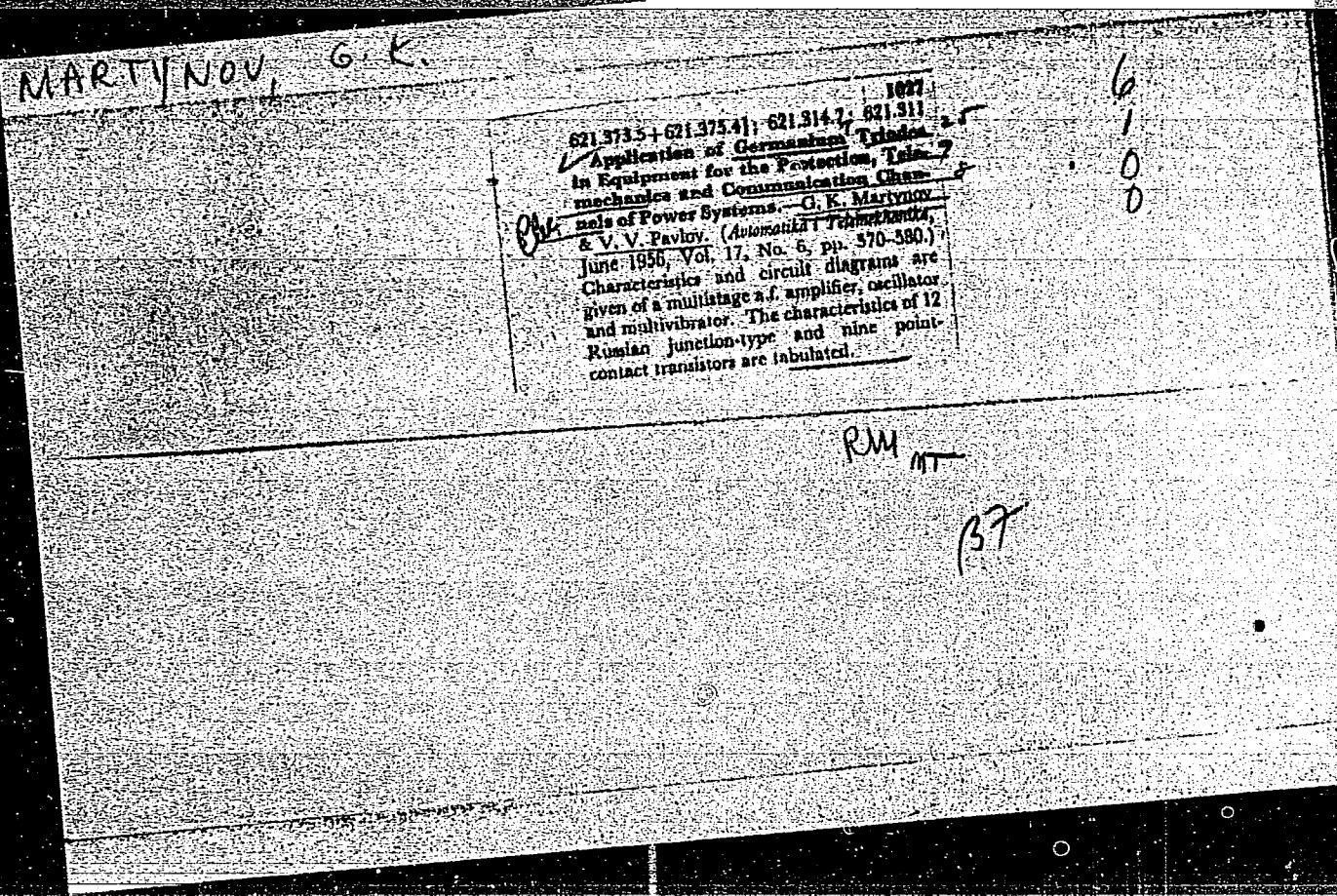
L 37134-66

ACC NR: AT6010486

on the cutting force in turning a cast alloy of iron-nickel-aluminum base (mark YuNPK24)  
in the heated state. Orig. art. has: 1 table and 2 figures.

SUB CODE: 13 / SUBM DATE: 08Jul65

Card 2/2 af



APANASENKO, A.D., starshiy nauchnyy sotrudnik; GUMELYA, A.N.; VOLNOVA, N.P., mladshiy nauchnyy sotrudnik; GERASIMOV, N.N., mladshiy nauchnyy sotrudnik; GERASIMOVA, R.V., mladshiy nauchnyy sotrudnik; KON'KOV, A.A., mladshiy nauchnyy sotrudnik [deceased]; MARTYNOV, G.K., starshiy tekhnik; FILIPPOVA, T.V., starshiy tekhnik; SUCHKOVA, Z.Ye., starshiy tekhnik. Prinimal uchastiye AKUL'SHIN, P.K., doktor tekhn.nauk, doktor tekhn.nauk. SVERDLOVA, I.S., red.; SHEFER, G.I., tekhn.red.

[Rules for the intersection of telephone lines in overhead telephone communication networks] Instruktsia po skreshchivaniyu telefonnykh tsepei vozдушnykh linii sviazi. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1959. 270 p.

(MIRA 13:2)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye mezhdugorodnoy telefonno-telegrafnoy svyazi.
2. TSentral'nyy nauchno-issledovatel'skiy institut svyazi Ministerstva svyazi SSSR (for Apansenko, Volnova, Gerasimov, Gerasimova, Kon'kov, Martynov, Filippova, Suchkova).
3. Nachal'nik laboratorii vozдушnykh liniy svyazi TSentral'nogo nauchno-issledovatel'skogo instituta svyazi Ministerstva svyazi SSSR (for Gumelyn).

(Telephone) (Electric lines--Overhead)

S/196/62/000/015/007/008  
E194/E155

AUTHOR:  
TITLE:

Martynov, G.K.

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika,  
no.15, 1962, 29, abstract 15 E 202. (Elektr. stantsii,  
no.4, 1962, 74-76)

TEXT: An experimental investigation of communications to  
transmission lines by antenna-type high-frequency  
equipment

The antenna method of communication is used between  
high-frequency portable sets and fixed repair centres of  
electrical transmission lines or of other lines of communication  
in the absence of communication lines (length, connection diagram, and  
others) is of great practical importance. The Laboratoriya svyazi  
(Communications Laboratory) of the VNIIE has investigated antenna  
communications and made practical recommendations. Antenna  
communications with a transmission line may be effected through  
the protective earth wire or a specially suspended conductor if

Card 1/2

An experimental investigation of ... S/196/62/000/015/007/008  
E194/E155

the span length is equal to or less than 200 - 250 metres. It is safer to work with an antenna earthed at the end. If the end of the antenna is insulated it is necessary to prevent contact between its conductor and the branches of trees, which can cause trouble in damp weather. Poor antenna insulation impairs tuning and much reduces the transmitter output. A quarter-wavelength antenna directed towards the other communications post has minimum transient damping if its end is earthed and in the opposite direction if its end is insulated. For communications over short distances the antenna length may be considerably less than one quarter wavelength.

Abstractor's note: Complete translation.]

Card 2/2

MARTYNOV, G.K., inzh.

Use of power transistors in the communication apparatus of electric power transmission lines. Trudy VNIIE no.12:73-80 '61. (MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektroenergetiki.

PALAMARCHUK, G.D.; MARTYNOV, G.P.

Mechanization and automation in the interrow cultivation of vineyards. Trudy VINITI "Magistrach" 8:153-171 '59. (MIRA 14:1)  
(Viticulture) (Cultivators)

KOROBOV, P.I.; KIL'NIKOV, V.P.; KOGA, A.F.; SKOCHINOV, A.A.; SHIVYAKOV,  
L.D.; SOKOLOV, A.; SOKOLOV, V.; SOGOL'KOV, Ya.F.; POKANVSKIY,  
M.A.; SOKOLOV, A.; SOGOL'KOV, T.P.; SOTNIKOV, V.S.; BOGDANOV, V.Ye.,  
DANZER, I.; SOKOLOV, V.F.; AGAFONOV, A.I.; SOKOLOV, A.V.; V. OZHIG,  
L.N.; IPATOV, P.M.; ALEXOV, P.P.; SLETSKII, G. .; SLETSKII, N.P.;  
TABINOVICH, V.I.; TSARSKII, V.N.; TROFIMOV, A.V.; AL'DIN, Ra.A.;  
DZIAPALDZE, Ye. .; SIVAVL'YEV, S.P.; KUZNETSOV, M. .; AL'NICH, I. .;  
NAIKHAG, M.P.; ALEXEIK, S.P.; KATAKUM, F. .; PLATOV, N.A.; KOSHTEN,  
A.F.; KASNOV, . .; SOKOLOV, O.O.; V. SADOV, V.B.; ZHEBAKOV, S.V.;  
SARAFANOV, I. .

Nikolai Nikolaevic Patrikeev - dictionary. Gor. zhur. no.6:76 J  
'60. (MIRA 14:2)  
(Patrikeev, Nikolai Nikolaevich, 1890-1960)

S/127/60/000/011/003/003  
E194/E484

AUTHOR: Martynov, G.P., Presidium Member of the Central Directorate

TITLE: 50th Anniversary of the Scientific-Technical Society of Ferrous-Metallurgy

PERIODICAL: Gornyy zhurnal, 1960, No.11, pp.76-77

TEXT: The Russian Metallurgical Society was founded in 1910 by A.A.Baykov, V.Ye.Grumb-Grzhimaylo, M.A.Pavlov and others and the first general meeting was held in Petersburg on February 21, 1910. The society became well-known at home and abroad particularly because of its excellent journal. The first Congress of Scientific Metallurgists in the country was held in 1920. It was attended by 220 members of the society. In 1925 the All-Union Association of Engineers was formed but had little popular basis and in 1929 it was reorganized by the All-Union Central Council of Trade Unions into scientific-technical societies of engineers, technicians and workers. In November 1931, the Central Committee of the Communist Party decided to organize scientific-technical societies with the object of raising the qualifications of the members, of working on scientific-technical problems relating to the reconstruction of the national economy and on the formulation

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S/127/60/000/011/003/003  
E194/E484

50th Anniversary of the Scientific-Technical Society of Ferrous-Metallurgy

and solution of new research and technical problems etc. At this time, the Scientific Engineering Technical Society of Metallurgists was formed and by 1932 had branches in many parts of the country. This society did useful work both before and during the war. An important stage in the development of scientific engineering and technical societies in the USSR was their reorganization in 1955 into mass scientific-technical societies led by the Trade Unions. The Scientific-Technical Society of Ferrous Metallurgy united people from all branches of ferrous metallurgy including those from iron-ore mines and from the manganese industry. The Scientific Technical Society of Ferrous Metallurgy organized far reaching conferences on scientific technical problems of metallurgy and from 1955 to 1960 there were more than 20 All-Union Conferences of personnel from quarries and ore treatment works, blast furnaces, steel mills and others. Local branches of the society held a large number of technical meetings. The branches of the society give important technical help in production. Competitions are organized to improve techniques and methods of

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S/127/60/000/011/003/003  
E194/E484

50th Anniversary of the Scientific-Technical Society of Ferrous-Metallurgy

manufacture. The society publishes papers of conferences on new techniques and all kinds of technical information. The experience of leading factories is publicized. On June 1, 1960 the number of branches of the Scientific Technical Society of Ferrous-Metallurgy was 341; the society had 53400 members. The society will be of considerable help in fulfilling the seven year plan.

ASSOCIATION: NTO ChM (Scientific Technical Society of Ferrous-Metallurgy)

Card 3/3

107-57-1-29/60

AUTHOR: Martynov, I. (Rozhdestvo RR station, Lipetsk oblast)

TITLE: Output-Transformer Repair in "Rodina-52." Experience Exchange (Remont vkhodnogo transformatora "Rodina-52". Obmen opyтом)

PERIODICAL: Radio, 1957, Nr 1, p 21 (USSR)

ABSTRACT: One half of the primary of "Rodina-52" output transformer often goes out of commission. A suggestion is made for changing the transformer circuit so that rewinding the burnt-out half of the primary is unnecessary.

AVAILABLE: Library of Congress

Card 1/1

MARTYNOV, I.A.

Investigating the loom locks beating process by high-speed  
motion picture photography. Izv.vys.ucheb.zav.; tekhn.tekst.  
prom. no.6:76-81 '58. (MIRA 12:4)

1. Moskovskiy tekstil'nyy institut.  
(Looms--Testing) (Motion-picture photography)

MARTYNOV, I. A., Cand Tech Sci -- (diss) "Some problems in the dynamics of high-speed weaving machines in non-stationary period of performance." Moscow, 1960. 21 pp, including cover; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Textile Institute); 150 copies; free; (KL, 19-60, 134)

MARTYNOV, I.A.

Determining dynamic deformations in lock and guide springs from impact  
in the frog. Izv.vys.ucheb.zav.;tekhn.tekst.prom. no.4:102-106 '60.  
(MIRA 13:9)

1. Moskovskiy tekstil'nyy institut.  
(Looms)

MARTYNOV, I.A.

Determining dynamic deformations in lock and guide springs caused by  
impact in the frog of the loom (continuation). Izv.vyz.ucheb.zav.;  
tekh.tekst.prom. no.5:86-95 '60. (MIRA 13:11)

I.Moskovskiy tekstil'nyy institut.  
(Looms)

MARTYNOV, I.A.

Investigating the state of stress of the elements of the  
batten and shuttle protection mechanisms during the impact  
on the frogs of the loom. Izv. vys. ucheb. zav.; tekhn. tekst.  
prom. no.4:143-152 '63. (MIRA 16:11)

1. Moskovskiy tekstil'nyy institut.

MARTYNOV, I.F.; SHIMCHENKO, D.K.

Unacceptable system. Put' i put. khoz. 7 no.6:43 '63.  
(MIRA 16:7)

1. Nachal'mik Dnepropetrovskoy distantsii zashchitnykh  
lesonasazhdenny (for Martynov). 2. Starshiy inzh. Dnepro-  
petrovskoy distantsii zashchitnykh lesonasazhdenny (for  
Shimchenko).

(Windbreaks, shelterbelts, etc.)

MARTYNOV, I.F.

ACTH therapy of bronchial asthma. Sov.med. 22 no.9:72-75 5'58  
(MIRA 11:11)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. - prof.  
A.M. Damir) pediatriceskogo fakul'teta II Moskovskogo meditsinskogo  
instituta imeni N.I. Pirogova.

(ASTHMA, ther.)

ACTH (Rus))

(ACTH, ther. use  
asthma (Rus))

MARTYNOV, I.F. (Moskva, ul. Bakhrushina, d.8, kv.6)

Functional state of the external respiratory apparatus in mitral stenosis. Grud.khir. 3 no.6:38-43 N-D '61. (MIRA 15:3)

1. Iz kafedry propedevtiki vnutrennykh bolezney (zav. - prof. A.M. Demir) pediatriceskogo fakul'teta II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova i kafedry grudnoy khirurgii i anesteziologii (zav. - prof. Ye.N. Meshalkin) TSentral'nogo instituta usovershenstvovaniya vrachey.  
(MITRAL VALVE--DISEASES) (RESPIRATION)

MARTYNOV, I. F.

Effect of mitral commissurotomy on the function of the apparatus  
of external respiration. Grud. khir. no.4:50-56 '61.  
(MIRA 14:12)

1. Iz kafedry propedevtiki vnutrennikh bolezney pediatriceskogo  
fakul'teta (zav. - prof. A. M. Damir) II Moskovskogo meditsinskogo  
instituta imeni N. I. Pirogova i Instituta eksperimental'noy bio-  
logii i meditsiny (dir. - prof. Ye. N. Meshalkin) Sibirskskogo  
otdeleniya AN SSSR.

(MITRAL VALVE—SURGERY) (RESPIRATION)

DAMIR, A. M., prof.; MARTYNOV, I. F.

Significance of the study on gas exchange following physical exertion in the differential diagnosis of mitral stenosis and mitral insufficiency. Terap. arkh. no.12:17-23 '61.  
(MIRA 15:2)

1. Iz propedevticheskoy terapeuticheskoy kliniki (zav. - prof. A. M. Damir) pediatriceskogo fakul'teta II Moskovskogo meditsinskogo instituta imeni N. I. Pirogova.

(MITRAL VALVE—DISEASES) (RESPIRATION)

DAMIR, A.M., prof.; MARTY OV, I.F.

Diagnosis and clinical importance of latent respiratory insufficiency in mitral stenosis. Terap.arkh. no.7:35-39 Jl '62. (MIRA 15:8)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. - prof. A.M. Demir) pediatricheskogo fakul'teta II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova.  
(MITRAL VALVE—DISEASES) (RESPIRATION)

*120 A. I. - 100*  
RAYEVSKIY, G.V.; BERNADSKIY, V.N.; LEBEDEV, B.F.; MARTYNOV, I.G.; TRUSHCHENKO,  
A.A.

Industrial methods for manufacturing pipes. Biul. stroi. tekhn. 14 no.5:  
10-13 My '57. (MIRA 10:6)

1. Institut elektrosvarki imeni Ye.O. Patona Akademii nauk USSR.  
(Pipe, Steel--Welding)

25(1)

AUTHOR:

Barbanell', R.I., Martynov, I.G., Lebedev, B.F.

TITLE:

Flat-Rolled Aluminum Pipes (Ploskovorachivayemyye  
alyuminiyevyye truby)

PERIODICAL:

Avtomatischekaya Svarka, 1959, Nr 1, p 18-24 (USSR)

ABSTRACT:

This article reports on experience in the production and assembly of flat-rolled aluminum pipes by methods worked out by the Experimental Design Office and the Institute of Electric Welding imeni Ye.G. Patch. The new technological process includes the semi-uninterrupted casting of round, hollow, thick-side ingots with an inner diameter equal to the diameter of the pipes to be cast. The inner surface is smeared with spindle oil and talc. The ingot is heated and rolled into a slab twice as thick as the future pipe. Surplus material on the edges is cut off, and the slab is rolled up, and is ready for use. A large consignment of pipes was prepared out of aluminum AD-1. The ingots were 7 m long, had an inner diameter of 150 mm, an outer diameter 290 mm. They were cut into pieces 2000-2500 mm in length, for the preparation

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25(1)  
Flat-Rolled Aluminum Pipes

SU-111-10-1-3 15

of 6-8m thick and 45-47 m long slabs. When it was cut under a pressure of 8 atm, the slab takes an almost round shape. The breaking pressure for pipes with 4 mm thick sides is 29-32 atm, with 3 mm sides it is 19-20 atm. In order to secure the pipe's strength, its edges must be 1.5 times stronger than the sides. The rolled aluminum piece had the following qualities: breaking point 10-12 kg/mm<sup>2</sup>; flow limit 7.5-14 kg/mm<sup>2</sup>; relative stretchability 3-34 %. According to SU-70 of the Glavneftegaz (Main Directorate for Oil Installations), the laying of such aluminum pipes is considerably easier and cheaper than that of regular steel pipes. It was found out that such uninsulated pipes tested well, but when used in alkaline ground, the pipes must be insulated on the outside. This method was worked out by I.G. Martynov, R.I. Barbaneli, P.A. Kolosov, and L.I. Stoklitskiy. The assembly work was carried out by B.P. Lebedev with help from M.I. Dzyubenko, I.F. Polimakov and

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25(1)  
Flat-Rolled Aluminum Pipes

SCV/147-39-1-5/15

A.D. Ivanov. There are two sets of photos, one diagram,  
one table and six Soviet references.

ASSOCIATION: Opytno-konstruktorskoye byuro moskovskogo oblastnogo  
sovnarkhoza (Experimental Designing Office of the  
Moscow oblast' Council of National Economy; Institut  
elektrosvarki imeni Ye. O. Patona, AN USSR (The In-  
stitute of Electric Welding imeni Ye.O Paton of AS UkrSSR).

SUBMITTED: October 22, 1958

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SOV/95-59-2-7/13

AUTHORS: Lebedev, B.F., Candidate of Technical Sciences, Filimonova,  
R.F., and Martynov, I.G., Engineers

TITLE: Aluminum Experimental Gas Pipeline (Opytnyy alyuminiiyevyy  
gazoprovod)

PERIODICAL: Stroitel'stvo truboprovodov, 1959, Nr 2, pp 19-21 (USSR)

ABSTRACT: An experimental gas pipeline has been installed 20 km south  
of the city of Shchokino, by order of the Glavgaz USSR, made  
from seamless flat rolled pipes, 150 mm in diameter, and with  
a wall thickness of 4 mm. This aluminum pipeline is in-  
tended for the transmission of sulfurous gas and the elimina-  
tion of corrosion, to which steel pipes are subject. The  
technology of production of these aluminum pipes is the same  
as that of steel pipes: the interior of the opening of a  
round hollow ingot is covered with a layer of antiwelding  
mastic and then flattened in a blooming mill. This ingot is  
then hot-rolled to a strip having twice the wall thickness  
of the pipe. The flat pipes are put in rolls and the open  
ends are fitted with flanges and welded sleeves. The rolls  
of flat pipes are unrolled on the site and placed alongside  
the line, where the pipe is to be installed. Under 5 atm

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Aluminum Experimental Gas Pipeline

SOV/95-59-2-7/13

pressure the flat pipe is then blown up to its intended round shape. It is recommended to carry out this operation under stretched condition of the pipe, to avoid dents and other irregularities liable to occur due to the uneven contours of the ground. The blown up tube sections are from 35 to 40 m long. The butts of the pipe sections are welded together with the use of insertion rings. Special flange joints are provided for connections between aluminum and steel pipes; while metal fittings are zinc plated, a dielectric washer and spacer are placed on the side of the aluminum flange. The article cites results of experience with aluminum pipes in the USA. There are 3 photographs, 2 diagrams, 1 table and 4 Soviet references.

Card 2/2

MARTYNOV, I

I

EPP  
R9/932

MIROVOYE ZNACHENIYE ROSSKOGA KLASSICHESKOGO OPIRY. MOSKVA, IZD-VO ZNANIY., 1952.

31 P. POS. (VSEGO YUZHENYE OSHCHESTVU VOSPREREMENIYU POLITICHESKIH I NAUCHNYKH ZNANIY. 1952, SERIYA 1, NO. 59)

RUSSIA

MARTYNOV, I. I.

"Isomerisation of methyl phenyl ethynyl carbinal in an acid medium."  
Venus-Lanilova, L. I., Ivanov, A. P., and Martynov, I. I. (p. 186)

SC: Journal of General Chemistry (Zhurnal Osnovnoi Khimii) 1951, Vol 31, No 1.

MARTYNOV, I.I.

Changes in transverse support cams used in multiple-spindle automatic machines. Stan. i instr. 27 no.12:37 D '56. (MLRA 10:2)  
(Cams)

MARTYNOV, I.M.

~~Physics evenings and conferences. Fiz. v shkole 18 no.4:69-72  
Jl-Ag '58.~~ (MIRA 11:7)

1.25-ya srednyaya shkola, g. Tyumen'.  
(Physics--Experiments)

MARTYNOV, I.M., inzh.

Planning the making up of transfer trains. Vest.TSNII MPS  
21 no.2:44-48 '62. (MIRA 15:4)

1. Ural'skoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo  
instituta zheleznodorozhnogo transporta Ministerstva putey  
soobshcheniya.  
(Railroads—Making up trains)

KOVELENOV, V.I.; MARTYNOV, I.M.

Using the air cooler of the turbogenerator for condensate heating. Prom.energ. 16 no.7:8 Jl '61. (MIRA 15:1)  
(Turbogenerators--Cooling)

L 25258-65

ACCESSION NR: AP5002697

S/0231/64/000/008/0055/0058

AUTHOR: Martynov, I. M. (Candidate of technical sciences); Tregubova, T. V.;  
Tregubov, G. G. (engineer)

TITLE: The use of electronic digital computers to plan the makeup of transfer  
trains

SOURCE: Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut Zheleznozorozhnogo  
transports. Vestnik, no. 8, 1964, 55-58

TOPIC TAGS: digital computer, transfer train, train makeup, freight station, ma-  
chine programming, combinatorial analysis

ABSTRACT: The different plans for making up transfer trains should be based on op-  
erating costs calculated from locomotive- and car-hours. Four different formulas  
are offered for determining the operating costs. The calculation of the operating  
costs for different directions can be facilitated to some extent by the compilation  
of nomograms and tables. However, automation which simplifies and accelerates the  
calculation processes can be achieved by the use of an electronic digital computer,  
particularly when the train makeup plan has to be corrected systematically and  
frequently to provide for the fluctuation of the rail traffic. The use of a ma-

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ACCESSION NR: AP5002697

chine for programming this type of train traffic makes it possible to combine all the traffic lines running in the same direction into 2, 3 and 4 train groups for each line. The calculation of the operating costs of each group of trains facilitates the development of different train-formation plans. An algorithm based on a combinatorial analysis has been developed for that purpose. The recent experiments and calculations made on the Sverdlovsk railroad line alone revealed that the daily use of the best train makeup plan will produce an annual saving of over 200,000 rubles. Orig. art. has: 8 formulas, 4 figures and 1 table.

ASSOCIATION: Ural'skoye otdeleniye TsNII MPS, Sverdlovsk (Urals branch, TsNII MPS)

SUBMITTED: 00

ENCL: 00

SUB CODE: DP, GO

NO REF SOV: 001

OTHER: 001

Card 2/2

VARGIN, S.N. (Sverdlovsk); MARTYNOV, I.M., inzh. (Sverdlovsk); TIMOSHKOY,  
V.M., inzh. (Sverdlovsk)

Improving the organization of mineral fertilizer transportation.  
Zhel.dor.transp. 46 no.6:16-18 Je '64. (MIRA 18:1)

1. Nachal'nik sluzhby dvizheniya Sverdlovskoy dorogi (for Vargin).

SENDEROV, G. K., inzh.; MARTYNOV, I. N., inzh.; IVANOVA, N. G., inzh.

Selecting the angle of the ascent grade of the floor of tower  
and bridge car dumpers. Vest TSNII MPS 23 no. 3:39-41 '64.  
(MIRA 17:5)

ANTON V. I.I., Chairman, Committee on Intelligence, [REDACTED] "intelligence resources." As, D.C. (pp. 1-12) and (pp. 1-12) of the House Select Committee on Intelligence, [REDACTED] (pp. 1-12)

AUTHOR: Martynov, I.r. Engineer 39-58-5-5/1C

TITLE: Seepage Through Segmented Sluices (Istecheniye iz-pod segmentnykh zatvorov)

PERIODICAL: Gidrotehnika : Melioratsiya. 1958. Nr 5, pp 35-42 (USSR)

ABSTRACT: In this article, the author derived several formulas to calculate seepage through segmented sluices into a horizontal groove. Professor I.I. Agroskin directed the research. There are 4 figures, 2 tables and 10 references, of which 6 are Soviet, 1 French, and 2 American, and 1 English.

AVAILABLE: Library of Congress

Card 1/1 1. Sluices-Seepage calculations

MARTYNOV, I.P., inzh.

Flow under a flat gate. Mauch.zap. MIIVKH 21:263-272  
'59. (MIRA 13:8)

(Hydraulics)

MARTYNOV, I.P., kand.tekhn.nauk

Distribution of pressure along the watershed of a practical contour  
in the presence of a discharge from beneath the sluice-gate. Izv.  
vys.ucheb.zav.; energ. 4 no.9:88-92 S '61. (MIRA 14:10)

1. Tomskiy inzhenerno-stroitel'nyy institut. Predstavlena kafedroy  
gidravliki i gidrotekhnicheskikh sooruzheniy.  
(Hydraulic structures) (Hydroelectric power stations)

MARTYNOV, I.P., kand.tekhn.nauk

← Experimental determination of discharge coefficients for flow  
under segmental gates on a spillway with a wide sill. Gidr.  
stroi. 32 no.5:39-40 My '62. (MIRA 15:5)  
(Hydrodynamics)

MARTYNOV, I.S., inzh.; SHURAVIN, A.D., inzh.

Combined benchboard for electric wiring. Priborostroenie no. 12:  
22 D '65. (MIRA 19:1)

MAREVNOU, I. V.

4

2-Hydroperfluoropropene, I. L. Kurnyanus, T. V.  
Martynov and E. G. Rukkostaya, U.S.S.R. 106,777,  
Aug. 25, 1957. Perfluoropropylene is condensed with  
HBr in the presence of a catalyst and the resulting 2-hydro-  
1-bromoerfluoropropane is dehalogenated. M. Jusch

4E4+

4E3d

11/13 4E2c(j)  
2-MAY

S/044/61/000/007/041/055  
C111/C222

AUTHOR: Martynov, I.V.

TITLE: On an approximate method for the solution of some static and dynamic problems of the theory of plates and beams

PERIODICAL: Referativnyy zhurnal Matematika, no. 7, 1961, 34,  
abstract 7 V 228. ("Tr. Nauchno-tekhn. o-va sudostroit.  
prom-sti", 1960, vyp 35, 85-118)

TEXT: The author investigates 1) free transverse oscillations of pressed or pulled beams, 2) the bending of a rectangular plate which is bedded on a permanent elastic base and simultaneously is submitted to a compression and a shunt loading and 3) the free transverse oscillations of a rectangular plate. All problems are solved for arbitrary boundary conditions, where in all cases approximate calculation formulas are obtained by the same transformations: partial differential equations are reduced to ordinary differential equations the solution of which is determined by a series arrangement. The intermediate calculations are analogous to the well-known calculations for the freely supported beam or plate. The possibility of such a simple treatment of the problems

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C111/C222

On an approximate method for the ...  
results by the use of line integrals and by the introduction of a  
magnitude  $\mu$  being independent of coordinates and time (mean value of  
the functional coefficient) instead of the ratio of two functions  
(functional coefficient). A foundation of the formula for the averaging  
of the coefficients  $\mu$  is given with the aid of the method due to  
Bubnov - Galerkin. It is stated that the proposed kind of the averaging  
has advantages compared with the known ones since it requires a minimum  
of calculations. A table contains the recommended fundamental functions  
and coefficients  $\mu$  for plates with a free boundary.  
[Abstracter's note : Complete translation.]

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MOVED FOR RE

MARTYNOV, I.V. (Moskva)

Leopold Auenbrugger; on the 150th anniversary of his death. Klin.  
med. 37 no.12:132-134 D '59. (MIRA 13:4)  
(AUENBURGER, LEOPOLD, 1722-1809)

MARTYNOW, I.V., polkovnik meditsinskoy sluzhby

Case of severe alimentary toxic infection resembling cholera. Voen.-  
med. zhur. no.5:66-67 My '61. (MI.A 14:8)  
(FOOD POISONING)

MARTINOV, I.V.; ASHMARIN, Yu.Ya.; BUROV, G.P. (Moskva)

Affection of certain internal organs in herpes zoster. Klin.  
med. 39 no. 5:95-98 My '61. (MIRA 14:5)  
(HERPES ZOSTER)

MARTYMOV, I. V.; KRUGLYAK, Yu. L.

Preparation of fluorinated  $\alpha$ -nitrocarboxylic acids. Zhur.  
VKHO 8 no.2:237 '63. (MIRA 16:4)

(Acids, Organic) (Fluorination)  
(Titration)

MARTYNOV, I. V.; KRUGLYAK, Yu. L.

Mechanism of the nitration of haloolefins with a nitrating mixture. Zhur. VKHO 8 no.2:237-238 '63.  
(MIRA 16:4)

(Olefins) (Nitration)

MARTYNOV, I.V.; KRUGLYAK, Yu.L.; MAKAROV, S.P.

Halo- $\alpha$ -nitrocarboxylic acids. Part 1: Derivatives of chloro-nitroacetic acid. Zhur.ob.khim. 33 no.10:3382-3384 O '63.

Halo- $\alpha$ -nitrocarboxylic acids. Part 2: Derivatives of fluoro-chloronitroacetic acid. 3384-3386

Halo- $\alpha$ -nitrocarboxylic acids. Part 3: Derivatives of  $\alpha$ -nitro-perfluorocarboxylic acids. 3386-3388 (MIRA 16:11)